

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of : **Cian E. O'Meara**
Serial No. : **09/740,201**
Filed : **December 18, 2000**
For : **Allocation Of Location-Based Orders To Mobile Agents**
Examiner : **Andre D. Boyce**
Art Unit : **3623**
Confirmation No. : **4327**
Customer No. : **23644**

REPLY BRIEF

Honorable Director of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This Reply Brief is in response to the Examiner's Answer dated November 19, 2007.

ARGUMENTS

The numbering of arguments set forth in the Examiner's Answer in the paragraph bridging pages 11 and 12 will be followed below.

However, as well as the eight numbered arguments, the following arguments were made in the appeal brief and are unanswered:

3A) if one in fact combines Kocur and Powell in a realistic and objective manner without hindsight, one arrives at a system which is outside the scope of the invention;

6A) with respect to claim 7, the Examiner has relied on an argument improperly based on inherency; and

8A) with respect to claims 21 and 29, Ditcharo fails to teach providing an agent with the ability to edit orders as these claims require.

These arguments are reiterated with reference to the Appeal Brief and continue to be relied on in support of Applicants' position.

Rebuttal of specific points in Examiner's Answer

Turning now to the numbered arguments, Applicants respond as follows:

1) Applicants had argued that the Powell schedule failed to include the required unscheduled locations which the agent is not due to visit. The Examiner's argument in response is that when "previously unscheduled pooled work requests" are inserted into an agent's schedule or route, then the result is that the schedule does include unscheduled locations which the agent is not currently due to visit.

In essence, therefore, the Examiner is arguing that the label "unscheduled" should permanently apply to a work order even when that work order has been allocated to an agent and placed into that agent's schedule or route. Applicants

respectfully argue that the logic of the Examiner's argument fails at the point when a previously unscheduled work order is allocated and inserted into a particular agent's schedule. "Unscheduled" is not a label or quality which applies permanently; it is a status which changes over time. Once in a schedule and on an agent's route, the work order is not unscheduled and the location is, by definition, a location which the agent is due to visit.

The basic point of Applicants' argument bears repeating. Every location in the Powell agent's schedule is a location of a work order allocated to the agent and on the agent's route. The listing does not include any locations which the agent is not currently due to visit.

2) Applicants fail to understand the rebuttal argument made by the Examiner. The flows from workers to work projects, calculated to minimize the distance of work-projects assigned to the agent, are only concerned with locations which the agent is scheduled to visit. There is no calculation involving unscheduled locations. The detailed argument in the Appeal Brief giving examples of Kocur's pair swapping method is relied on fully to explain Applicants' position.

3) The Examiner has quoted from *KSR* in response to Applicants contention that it was not clear what argument was being made in relation to motivation to combine. The cited passage from *KSR* (and within that passage, from *In Re Kahn*) says firstly that it is necessary to "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue", before going on to clarify that while mere conclusory statements are not sufficient and there must be some articulated reasoning, "the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim".

The passage quoted does not relieve the Examiner of the requirement for "articulated reasoning", it merely states that the references do not need precise teachings directed to the subject-matter of the challenged claims, as the court can take account of inferences and creative steps. Nowhere does *KSR* state that the articulated reasoning can be dispensed with, or that insufficient or unconvincing reasoning will suffice. Applicants respectfully submit that the reasoning underlying

the suggested combination is not present or, alternatively, is not convincing if present. Finally, it is noted that the Examiner's Answer does not supplement the alleged motivation in the final rejection. If this was deficient (as Applicants have argued) then nothing is added in the Examiner's Answer to remedy this deficiency.

3A) As noted above, the arguments made in the Appeal Brief regarding a realistic combination of Powell and Kocur, and the fact that such a combination falls outside the claim scope, remain unanswered.

4) Applicants' earlier argument apparently needs to be clarified. The final rejection stated that the prioritized listing of locations including both scheduled and unscheduled locations was found in Powell's "pooled queue 20 of pooled work orders associated with geographic location". If this is the argument being made in relation to claim 1, then that "prioritized listing" in claims 4, 5 and 34, is not individualized for an agent.

In fact, the argument made by the Examiner seems to associate the claimed "prioritized listing" with two separate entities in Powell at different points in the same rejection – it is equated to the pooled queue of work orders at some points, and is equated to the agent's individual schedule at other points. It cannot be both, and such reasoning is improper.

5) See the argument under 4: Applicants submit that the reasoning made in the rejection of claim 5, where the prioritized listing is equated with the agent's schedule, is incompatible with claim 1, where the same listing is equated with the pool of unassigned work orders.

6) The issue of the typographic error is now moot, as the Examiner and Applicants are in agreement on the intended meaning.

The Examiner points out that the allocation of orders is based on several factors, including employee preferences, concluding from this that "As such, creation and revision of the work assignments and schedules necessarily include employee preferences and acceptance of the work assignments and schedules." Applicants

fail to see how the underlined conclusion has been reached simply because the employee preferences are taken into account when creating the schedule.

Applicants suggest that a scheduling algorithm which takes account of recorded employee preferences might involve considerations such as not allocating an out-of-hours order to an employee who prefers not to work overtime, or not allocating a male call-out customer to a female employee who has expressed a preference to only make call-outs to female customers. Once such a schedule is created, having taken account of such preferences, there is no mechanism provided for the employee to accept or reject the order, as claim 7 requires.

6A) The argument made on improper reliance on inherency, with reference to MPEP 2112, IV, is reiterated and remains unanswered.

7) The argument being made in relation to claims 9-13 is related to arguments 4) and 5) above: the rejection of claim 1 equates the prioritized listing with the pooled queue. The Examiner's argument for these claims finds its basis in the individual agent schedules, not the pooled queue. Applicants accordingly argue that there is an inconsistency between the claim 1 rejection and the claims 9-13 rejections.

8) It is accepted that the passages now relied on in Ditcharo (which were not previously mentioned in the final office action) do indeed disclose the agents accessing assignment information, i.e. details of a single current assignment. However, claims 21 and 29 require that the agents can access the "current order record" of claim 1, namely a record "identifying a first location and first time at which each agent is expected to become free to fulfil a new order". Note that for a busy agent with a full schedule, this time and place is unlikely to be the time and place at which the currently active assignment is to be completed – rather it is the first time when the agent has a slot in the schedule for a new order. No such current order record is mentioned in Ditcharo.

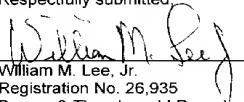
8A) Without prejudice to the argument above, and accepting that the agent can access details of the current assignment in Ditcharo, the argument made in relation to the editing of the current order record was apparently not addressed by the

Examiner's Answer. Ditcharo provides no teaching of the agent being given the facility to edit a record identifying the first location and time at which the agent is expected to become free.

It is therefore submitted that the Examiner's rejection of the application is clearly in error, and should be reversed. A decision by the Board is now awaited.

January 18, 2008

Respectfully submitted,



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